

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-54 (Canceled).

Claim 55 (New) A sheet feeding device comprising:

a feed roller;

a separation member pressed against and into contact with said feed roller with a pressure applied between said feed roller and said separation member, wherein sheets conveyed into a position between said feed roller and said separation member are separated and conveyed one by one; and

a pressing device configured to cyclically provide a change in the pressure applied between said feed roller and said separation member,

wherein said pressing device is arranged at a side of the sheets, when the sheets are separated and conveyed one by one,

wherein said pressing device is provided on the feed roller, and

wherein said pressing device uses a magnetic force.

Claim 56 (New) A sheet feeding device comprising:

a feed roller;

a separation member pressed against and into contact with said feed roller with a pressure applied between said feed roller and said separation member, wherein sheets conveyed into a position between said feed roller and said separation member are separated and conveyed one by one; and

a pressing device configured to cyclically provide a change in the pressure applied between said feed roller and said separation member,

wherein said separation member is chosen from a group consisting of 1) a friction pad elastically pressed against and into contact with said feed roller; 2) a friction roller upwardly and elastically supported by an axis, said axis being rotated by a driving gear and a gear engaged with said driving gear and supported at one side thereof, and said friction roller being arranged at a free end side of said axis via a torque limiter, so as to be rotated only in a sheet feeding direction; and 3) a reverse roller upwardly and elastically supported by an axis, said axis being rotated by a driving gear and a gear engaged with said driving gear and supported at one side thereof, said reverse roller being arranged at a free end side of the axis via a torque limiter, so as to be rotated in a sheet feeding direction and a direction opposite the sheet feeding direction.

Claim 57 (New) A sheet feeding device comprising:

a feed roller;
a reverse roller pressed against and into contact with said feed roller with a pressure applied between said feed roller and said reverse roller, said reverse roller being upwardly and elastically supported by an axis, said axis being supported at one side thereof and being rotated by a driving gear and a gear engaged with said driving gear, said reverse roller being supported at a free end side of said axis and arranged via a torque limiter, so as to be rotated in a sheet feeding direction and a direction opposite the sheet feeding direction, wherein sheets conveyed between said feed roller and said reverse roller are separated and are conveyed one by one; and

a pressing device configured to provide a cyclic change in the pressure applied between said feed roller and said reverse roller, said pressing device being arranged at a side of said reverse roller.

Claim 58 (New) A sheet feeding device comprising:

a feed roller;

a friction roller pressed against and into contact with said feed roller with a pressure applied between said feed roller and said friction roller, said friction roller being upwardly and elastically supported by an axis, said axis being supported at one side thereof and being rotated by a driving gear and a gear engaged with said driving gear, said friction roller being arranged at a free end side of said axis via a torque limiter, so as to be rotated only in a sheet feeding direction, wherein sheets conveyed between said feed roller and said friction roller are separated and are conveyed one by one; and

a pressing device configured to provide a cyclic change in the pressure applied between said feed roller and said friction roller, said pressing device being arranged at a side of said friction roller.

Claim 59 (New) The sheet feeding device of claim 57, wherein said pressing device uses a magnetic force, and said pressing device provides the cyclic change in the pressure more than one time as said reverse roller makes one rotation.

Claim 60 (New) The sheet feeding device of claim 58, wherein said pressing device uses a magnetic force, and said pressing device provides the cyclic change in the pressure more than one time as said friction roller makes one rotation.

Claim 61 (New) The sheet feeding device of claim 57, further comprising a sheet guiding member configured to regulate advancement of the sheets downstream of said feed roller in the sheet feeding direction.

Claim 62 (New) The sheet feeding device of claim 58, further comprising a sheet guiding member configured to regulate advancement of the sheets downstream of said feed roller in the sheet feeding direction.

Claim 63 (New) The sheet feeding device of claim 57, wherein all three of said feed roller, said reverse roller, and said pressing device are integrally constructed as a unit, which is attachable to and detachable from an image forming apparatus.

Claim 64 (New) The sheet feeding device of claim 58, wherein all three of said feed roller, said friction roller, and said pressing device are integrally constructed as a unit, which is attachable to and detachable from an image forming apparatus.

Claim 65 (New) An image forming apparatus comprising:
an image forming device;
a sheet feeding device configured to convey a sheet to said image forming device, wherein said image forming device is configured to form an image on the sheet conveyed from said sheet feeding device, and said sheet feeding device includes a feed roller and a separation member, said separation member being pressed against and into contact with said feed roller with a pressure applied between said feed roller and said separation member, wherein a plurality of the sheets conveyed between said feed roller and said separation member are separated and conveyed one by one to said image forming device; and
a pressing device configured to cyclically provide a change in the pressure applied between said feed roller and said separation member,
wherein said pressing device is arranged at a side of the sheets, when the sheets are separated and conveyed one by one,

wherein said pressing device is provided on said feed roller, and
wherein said pressing device uses a magnetic force.

Claim 66 (New) An image forming apparatus comprising:
an image forming device;
a sheet feeding device configured to convey a sheet to said image forming device,
wherein said image forming device is configured to form an image on the sheet conveyed
from said sheet feeding device, and said sheet feeding device includes a feed roller and a
separation member, said separation member being pressed against and into contact with said
feed roller with a pressure applied between said feed roller and said separation member,
wherein a plurality of the sheets conveyed between said feed roller and said separation
member are separated and conveyed one by one to said image forming device; and
a pressing device configured to cyclically provide a change in the pressure applied
between said feed roller and said separation member,
wherein said sheet separation member is chosen from any one of a group consisting of
1) a friction pad elastically pressed against and into contact with said feed roller; 2) a friction
roller upwardly and elastically supported by an axis, said axis being rotated by a driving gear
and a gear engaged with said driving gear and supported at one side thereof, and said friction
roller being arranged at a free end side of said axis via a torque limiter, so as to be rotated
only in a sheet feeding direction; and 3) a reverse roller upwardly and elastically supported
by an axis, said axis being rotated by a driving gear and a gear engaged with said driving gear
and supported at one side thereof, said reverse roller being arranged at a free end side of said
axis via a torque limiter, so as to be rotated in a sheet feeding direction and a direction
opposite the sheet feeding direction.

Claim 67 (New) An image forming apparatus comprising:

an image forming device;

a sheet feeding device configured to convey a sheet to said image forming device,

wherein said image forming device forms an image on the sheet

conveyed from said sheet feeding device, said sheet feeding device including a feed roller and a reverse roller, wherein said reverse roller is pressed against and into contact with said feed roller with a pressure applied between said feed roller and said reverse roller, said reverse roller being upwardly and elastically supported by an axis, said axis being supported at one side thereof and being rotated by a driving gear and a gear engaged with said driving gear, said reverse roller being supported at a free end side of said axis and arranged via a torque limiter, so as to be rotated in a sheet feeding direction and a direction opposite the sheet feeding direction, wherein a plurality of the sheets conveyed between said feed roller and said reverse roller are separated and are conveyed one by one to the image forming device; and

a pressing device configured to provide a cyclic change in the pressure applied between said feed roller and said reverse roller, said pressing device being arranged at a side of the reverse roller.

Claim 68 (New) An image forming apparatus comprising:

an image forming device;

a sheet feeding device configured to convey a sheet to said image forming device,

wherein said image forming device is configured to form an image on the sheet conveyed

from said sheet feeding device, said sheet feeding device including a feed roller and a friction roller, wherein said friction roller is pressed against and into contact with said feed roller with a pressure applied between said feed roller and said friction roller, said friction roller being

upwardly and elastically supported by an axis, said axis being supported at one side thereof and being rotated by a driving gear and a gear engaged with said driving gear, said friction roller being arranged at a free end side of said axis via a torque limiter, so as to be rotated only in a sheet feeding direction, wherein a plurality of the sheets conveyed into between said feed roller and said friction roller are separated and are conveyed one by one to said image forming device; and

a pressing device configured to provide a cyclic change in the pressure applied between said feed roller and said friction roller, said pressing device being arranged at a side of said friction roller.

Claim 69 (New) The image forming apparatus of claim 67, wherein said pressing device uses a magnetic force, and said pressing device provides the cyclic change in the pressure more than one time as said reverse roller makes one rotation.

Claim 70 (New) The image forming apparatus of claim 68, wherein said pressing device uses a magnetic force, and said pressing device provides the cyclic change in the pressure more than one time as said friction roller makes one rotation.

Claim 71 (New) The image forming apparatus of claim 67, wherein said sheet feeding device includes a sheet guiding member configured to regulate advancement of the sheets downstream of said feed roller in the sheet feeding direction.

Claim 72 (New) The image forming apparatus of claim 68, wherein said sheet feeding device includes a sheet guiding member configured to regulate advancement of the sheets downstream of said feed roller in the sheet feeding direction.

Claim 73 (New) The image forming apparatus of claim 67, wherein all three of said feed roller, said reverse roller, and said pressing device are integrally constructed as a unit, which is attachable to and detachable from said image forming apparatus.

Claim 74 (New) The image forming apparatus of claim 68, wherein all three of said feed roller, said friction roller, and said pressing device are integrally constructed as a unit, which is attachable to and detachable from said image forming apparatus.

Claim 75 (New) A sheet feeding device comprising:

a feed roller;

a reverse roller pressed against and into contact with said feed roller with a pressure applied between said feed roller and said reverse roller, said reverse roller being upwardly supported by an axis, said axis being supported at one side thereof and being rotated by a driving gear and a gear engaged with said driving gear, said reverse roller being supported at a free end side of said axis and arranged via a torque limiter, so as to be rotated in a sheet feeding direction and a reverse direction, wherein sheets conveyed into a position between said feed roller and said reverse roller are separated and are conveyed one by one; and
pressing means for providing a cyclic change in the pressure applied between said feed roller and said reverse roller, said pressing means being arranged at a side of said reverse roller.

Claim 76 (New) A sheet feeding device comprising:

a feed roller;

a friction roller pressed against and into contact with said feed roller with a pressure applied between said feed roller and said friction roller, said friction roller being upwardly and elastically supported by an axis, said axis being supported at one side thereof and being rotated by a driving gear and a gear engaged with said driving gear, said friction roller being arranged at a free end side of said axis via a torque limiter, so as to be rotated only in a sheet feeding direction, wherein sheets conveyed into a position between said feed roller and said friction roller are separated and are conveyed one by one; and

pressing means for providing a cyclic change in the pressure applied between said feed roller and said friction roller, said pressing means being arranged at a side of said friction roller.

Claim 77 (New) An image forming apparatus comprising:

image forming means for forming an image;
sheet feeding means for conveying a sheet to said image forming means, said sheet feeding means including a feed roller and a reverse roller, said reverse roller being pressed against and into contact with said feed roller with a pressure applied between said feed roller and said reverse roller, said reverse roller being upwardly supported by an axis, said axis being supported at one side thereof and being rotated by a driving gear and a gear engaged with said driving gear, said reverse roller being supported at a free end side of said axis and arranged via a torque limiter, so as to be rotated in a sheet feeding direction and a reverse direction, wherein sheets conveyed into a position between said feed roller and said reverse roller are separated and are conveyed one by one to said image forming means; and

pressing means for providing a cyclic change in the pressure applied between said feed roller and said reverse roller, said pressing means being arranged at a side of said reverse roller.

Claim 78 (New) An image forming apparatus comprising:

image forming means for forming an image;

sheet feeding means for conveying a sheet to said image forming means, said sheet feeding means including a feed roller and a friction roller, said friction roller being pressed against and into contact with said feed roller with a pressure applied between said feed roller and said friction roller, said friction roller being upwardly and elastically supported by an axis, said axis being supported at one side thereof and being rotated by a driving gear and a gear engaged with said driving gear, said friction roller being arranged at a free end side of said axis via a torque limiter, so as to be rotated only in a sheet feeding direction, wherein sheets conveyed into a position between said feed roller and said friction roller are separated and are conveyed one by one to said image forming means; and

pressing means for providing a cyclic change in the pressure applied between said feed roller and said friction roller, said pressing means being arranged at a side of said friction roller.